Application No.: 10/680,797 Response Date: May 5, 2005

## **Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of claims:**

- 1. (previously presented) An electrical wiring system comprising:
  - a plug connector device configured to terminate a plurality of wires, the plurality of wires being configured to transmit electrical power provided by an electrical power distribution system; and
  - an electrical wiring device configured to provide the electrical power to a load, the electrical wiring device including a receptacle disposed therein, the receptacle being configured to receive the plug device, whereby electrical continuity is established between the electrical wiring device and the plurality of wires when the plug device is inserted into the receptacle.
- 2. (original) The system of claim 1, wherein the plug device includes female electrical contacts and the receptacle includes male electrical contacts.
- 3. (original) The system of claim 1, wherein the plug device includes male electrical contacts and the receptacle includes female electrical contacts.
- 4. (original) The system of claim 1, wherein the electrical wiring device includes a communications device configured to transmit a system status.
- 5. (original) The system of claim 4, wherein the communications device is configured to transmit the system status via a communications wire, the plug connector being configured to accommodate the communications wire.
- 6. (original) The system of claim 4, wherein the communications device is configured to transmit the system status optically.

- 7. (original) The system of claim 4, wherein the communications device is configured to transmit the system status by way of an electromagnetic transmission.
- 8. (original) The system of claim 7, wherein the electromagnetic transmission includes an RF signal.
- 9. (original) The system of claim 4, wherein the communications device is configured to transmit the system status acoustically.
- 10. (original) The system of claim 1, wherein the plurality of wires includes an AC power conductor and a neutral conductor.
- 11. (original) The system of claim 1, wherein the plurality of wires are configured to carry three-phase power.
- 12. (original) The system of claim 1, wherein the plurality of wires includes a ground wire.
- 13. (original) The system of claim 1, wherein the electrical wiring device includes an electrical receptacle configured to accept a power plug coupled to an electrical load.
- 14. (original) The system of claim 1, wherein the electrical wiring device includes an electrical switch.
- 15. (original) The system of claim 1, wherein the electrical wiring device includes a GFCI device.
- 16. (original) The system of claim 1, wherein the electrical wiring device includes a lighting fixture.
- 17. (original) The system of claim 1, wherein the electrical wiring device includes a sensor device.

- 18. (original) The system of claim 1, wherein the electrical wiring device includes a transient voltage surge suppressor.
- 19. (original) The system of claim 1, wherein the electrical wiring device includes an environmental regulation device.
- 20. (original) The system of claim 1, wherein the electrical wiring device includes a timer device.
- 21. (original) The system of claim 1, wherein the plug device includes a plurality of self-locking contacts, each self-locking contact accommodating one of the plurality of wires, such that electrical continuity is established between each wire and each plug contact, and wherein each plug contact corresponds to a contact disposed in the receptacle.
- 22. (currently amended) The system of claim 1, wherein the plug device includes a plurality of threaded wire-nut elements twist-on wire connectors, each threaded wire-nut element twist-on wire connector being coupled to a plug contact and configured to accommodate one of the plurality of wires, such that electrical continuity is established between each wire an each plug contact, and wherein each plug contact corresponds to a contact disposed in the receptacle.
- 23. (original) The system of claim 1, wherein the plug device further comprises:
  - a first housing portion;
  - a second housing portion configured to mate with the first housing portion to thereby form the plug device housing; and
  - a plurality of contacts including blade elements, the plurality of contacts being disposed in either the first plug connector housing or the second plug connector housing or both, the blade elements being configured to displace insulation disposed on the plurality of wires when the second plug connector housing is coupled to the first plug connector housing, whereby electrical

continuity is established between each wire and a corresponding one of the plurality of contacts.

- 24. (original) The system of claim 1, further including a second plurality of wires configured to transmit electric power to a feed-through device, wherein the plug device is configured to terminate the second plurality of wires to thereby electrically couple the electric power source to the second plurality of wires.
- 25. (original) The system of claim 24, wherein the electrical wiring device includes an electrical receptacle configured to accept a power plug coupled to an electrical load.
- 26. (original) The system of claim 24, further comprising a second plug connector device configured to terminate the second plurality of wires, the second plurality of wires being configured to transmit electrical power provided by an electrical power distribution system to the feed-through device.
- 27. (original) The system of claim 26, wherein the electrical wiring device includes an electrical receptacle configured to accept a power plug coupled to an electrical load.
- 28. (original) The system of claim 1, further comprising a latching mechanism configured to prevent the plug connector device from being removed from the receptacle to thereby ensure that electrical continuity is maintained between the electrical wiring device and the plurality of wires.
- 29. (original) The system of claim 28, wherein the latching mechanism is manually moveable to permit removal of the plug connector device from the receptacle.
- 30. (original) The system of claim 28, wherein the latching mechanism provides an indication that the plug connector is locked in the inserted position.
- 31. (original) The system of claim 28, wherein the indication is an audible indication.

- 32. (original) The system of claim 28, wherein the indication is an visual indication.
- 33. (original) A method for installing electrical wiring, the method comprising: installing a plurality of wires from a first location to an electrical device location, at least a portion of the plurality of wires being configure to transmit electrical power;

terminating the plurality or wires with a plug connector;

- providing an electrical wiring device configured to provide electrical power to a load, the electrical wiring device including a receptacle disposed therein, the receptacle being configured to receive the plug device; and inserting the plug connector into the receptacle, whereby electrical continuity is established between the electrical wiring device and the plurality of wires.
- 34. (original) The method of claim 33, and wherein the step of terminating includes the step of inserting each of the plurality or wires into a self-locking contact element within the plug connector, such that there is electrical continuity between each wire and each plug contact.
- 35. (currently amended) The method of claim 33, wherein the step of terminating further comprises the steps of:
  - inserting each wire into a corresponding one of a plurality of threaded wire-nuts twiston wire connectors coupled to the plug connector, each threaded wire nut
    twist-on wire connector being coupled to a plug contact and configured to
    accommodate one of the plurality of wires, and
  - twisting each wire nut twist-on wire connector such that the wire is secure within the

    wire nut twist-on wire connector and electrical continuity is established

    between each wire and each plug contact.
- 36. (original) The method of claim 33, and wherein the step of terminating further comprises: inserting the plurality of wires into a first plug connector housing; and coupling a second plug connector housing to the first plug connector housing to thereby terminate the plurality of wires in the plug connector, either the first plug connector housing or the second plug connector housing, or both,

including contacts having blade elements, the blade element being configured to displace insulation disposed on the plurality of wires when the second plug connector housing is coupled to the first plug connector housing, whereby electrical continuity is established between each wire and a corresponding contact.

- 37. (original) The method of claim 33, wherein the plug device includes female electrical contacts and the receptacle includes male electrical contacts.
- 38. (original) The method of claim 33, wherein the plug device includes male electrical contacts and the receptacle includes female electrical contacts.
- 39. (original) The method of claim 33, wherein the steps of installing further comprises: disposing conduit between the first location and the second location; and pulling the plurality of wires through the conduit.
- 40. (withdrawn) A plug connector configured to terminate a plurality of wires, the plurality of wires being configured to transmit electrical power provided by an electrical power distribution system, the connector comprising:
  - a housing having a shape configured to fit within with a corresponding receptacle; and a plurality of self-locking contacts disposed in the housing, each of the plurality of self-locking contacts being configured to terminate one of the plurality of wires, such that electrical connectivity is established between each self-locking contact and one wire.
- 41. (withdrawn) A plug connector configured to terminate a plurality of wires, the plurality of wires being configured to transmit electrical power provided by an electrical power distribution system, the connector comprising:
  - a housing having a shape configured to fit within with a corresponding receptacle; a plurality of contacts disposed with the housing; and

- a plurality of wire nut devices, each wire nut device being coupled to one contact,
  each wire nut device being configured to terminate a wire, such that electrical
  continuity is established between a wire and one of the plurality of contacts.
- 42. (withdrawn) A plug connector configured to terminate a plurality of wires, the plurality of wires being configured to transmit electrical power provided by an electrical power distribution system, the connector comprising:
  - a first housing portion;
  - a second housing portion configured to mate with the first housing portion to thereby form the plug device housing; and
  - a plurality of contacts including blade elements, the plurality of contacts being disposed in either the first plug connector housing or the second plug connector housing or both, the blade elements being configured to displace insulation disposed on the plurality of wires when the second plug connector housing is coupled to the first plug connector housing, whereby electrical continuity is established between each wire and a corresponding one of the plurality of contacts.
- 43. (withdrawn) An electrical wiring device, the device comprising:
  - a housing;
  - a power output element disposed within the housing, the power output element being configured to provide electrical power to a load; and
  - an input receptacle disposed within the housing, the input receptacle including a plurality of electrical receptacle contacts, whereby electrical continuity is established between the plurality of electrical receptacle contacts and the power output element such that electrical power may be transmitted from the plurality of electrical receptacle contacts to the power output element.
- 44. (withdrawn) The device of claim 43, wherein the input receptacle is configured to receive a plug device, the plurality of electrical receptacle contacts being configured to mate with a plurality of contacts in the plug device.

- 45. (withdrawn) The device of claim 43, wherein the electrical wiring device includes an electrical receptacle configured to accept a power plug coupled to an electrical load.
- 46. (withdrawn) The device of claim 43, wherein the electrical wiring device includes an electrical switch.
- 47. (withdrawn) The device of claim 43, wherein the electrical wiring device includes a GFCI device.
- 48. (withdrawn) The device of claim 43, wherein the electrical wiring device includes a lighting fixture.
- 49. (withdrawn) The device of claim 43, wherein the electrical wiring device includes a sensor device.
- 50. (withdrawn) The device of claim 43, wherein the electrical wiring device includes a transient voltage surge suppressor.
- 51. (withdrawn) The device of claim 43, wherein the electrical wiring device includes an environmental regulation device.
- 52. (withdrawn) The device of claim 43, wherein the electrical wiring device includes a timer device.
- 53. (withdrawn) A connector device for interconnecting a plurality of wires that are adapted to transmit power provided by an electrical distribution system to an electrical device, comprising:
- a. a housing adapted to be positioned in contacting relation with the electrical device; and
- b. a plurality of electrical contacts connected to said housing and to which said plurality of wires are electrically connected.

- 54. (withdrawn) The connector of claim 53, wherein said plurality of contacts are each electrically conducting blades.
- 55. (previously presented) A method for installing an electrical wiring device, comprising the steps of:
- a. providing a connector device that is adapted to be operably received by the electrical wiring device and that includes a first plurality of electrical contacts disposed therein;
- b. terminating the connector device to a plurality of wires, the plurality of wires being in electrical communication with said first plurality of electrical contacts;
- c. providing the electrical wiring device with a predetermined area in which a second plurality of electrical contacts are disposed, the electrical wiring device including at least one element configured to provide electrical power to a load; and
- d. placing said connector device into electrical communication with the electrical device, wherein said first plurality of electrical contacts are in contacting relation with corresponding ones of said second plurality of electrical contacts.
- 56. (previously presented) The method for interconnecting a plurality of wires according to claim 55, wherein said predetermined area is a receptacle adapted to receive said first plurality of contacts therein.
- 57. (original) The electrical wiring system according to claim 56, wherein said second plurality of electrical contacts comprise female receptacles.
- 58. (original) The electrical wiring system according to claim 55, wherein said second plurality of electrical contacts comprise female receptacles.
- 59. (original) The electrical wiring system according to claim 58, wherein said first plurality of electrical contacts comprises blades.
- 60. (original) The electrical wiring system according to claim 55, wherein said first plurality of electrical contacts comprises blades.

- 61. (previously presented) An electrical wiring system comprising:
- a. an electrical wiring device comprising a predefined area in which a first plurality of electrical contacts are positioned, the electrical wiring device including at least one element configured to provide electrical power to a load;
- b. a connector device configured to be positioned in contacting relation with the electrical wiring device, the connector device including a plurality of termination elements configured to terminate a plurality of wires; and
- c. a second plurality of electrical contacts disposed in said connector device and electrically coupled to said plurality of termination elements, the second plurality of electrical contacts being configured to be placed in electrical contact with said first plurality of electrical contacts when said connector device is positioned in contacting relation with said electrical wiring device.
- 62. (original) The electrical wiring system according to claim 61, wherein said predefined area is a receptacle adapted to receive said second plurality of contacts therein.
- 63. (original) The electrical wiring system according to claim 62, wherein said first plurality of electrical contacts comprise female receptacles.
- 64. (original) The electrical wiring system according to claim 61, wherein said first plurality of electrical contacts comprise female receptacles.
- 65. (original) The electrical wiring system according to claim 64, wherein said second plurality of electrical contacts comprises blades.
- 66. (original) The electrical wiring system according to claim 61, wherein said second plurality of electrical contacts comprises blades.

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## Amendments to the Specification

Please replace paragraph [9] with the following amended paragraph:

[9] In yet another aspect, the present invention includes a plug connector configured to terminate a plurality of wires. The plurality of wires are configured to transmit electrical power provided by an electrical power distribution system. The connector includes a housing, and a plurality of contacts disposed with the housing. A plurality of wire nut twist-on wire connector devices are coupled to corresponding ones of the plurality of contacts. Each of the at least one wire nut twist-on wire connector devices are configured to terminate one wire, such that electrical continuity is established between each wire and each contact.

Please replace paragraph [42] with the following amended paragraph:

[42] Referring to FIG. 12, a perspective view of plug connector 20 is shown, illustrating a second method for terminating wires 12 to plug connector 20. In this embodiment, plug 20 is equipped with leads 214 which are terminated to contacts 202 at the factory. During wire 12 termination, wire nut twist-on wire connector 212 is essentially screwed onto stripped wire 12.

Please replace paragraph [46] with the following amended paragraph:

[46] Referring to FIG. 15, a perspective view of a feed-through plug connector in accordance with an embodiment of the invention. As those of ordinary skill in the art will understand, often receptacles are daisy chained by way of feed through wires. In this embodiment, there is electrical connectivity between wire 12A and wire terminal 226, wire 2B and wire terminal 228, and wire 12C and wire terminal 230. Those of ordinary skill in the art will recognize that a feed through wire may be connected to terminal 226, 228, or 230 by any suitable means. For example, the feed-through wire may be connected to the wire

terminal in a pre-assembled manner, such as that shown in FIG. 7. Terminals 226, 228, and 230 may be configured as wire-nut twist-on wire connector terminals, as show in FIG. 12. Further, the method described in FIG. 13 may also be used to terminate feed-through wires to terminals 226, 228, and 230. Terminals 226, 228 and 230 can be included in connector plug 20. Alternatively, terminals 226, 228 and 230 can be in a second connector plug 20' that attaches to a receptacle 306' electrically coupled to wires 12A, 12B and 12C (not shown). Wires 12A, 12B, and 12C may couple electricity to wiring device 30 either through connector plug 20 or some alternate means such as screw terminals. In addition, connector plugs 20 and 20' may be configured so as to not be interchangeable.